

SEP 11 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§	Examiner: Zakiya W. Bates
	§	
Monroe et al	§	
	§	
Serial No.: 10/810,539	§	Group Art Unit: 3676
	§	
Filed: March 26, 2004	§	
	§	
For: Method of Forming	§	Attorney Docket No. 020569-07100
Temporary Blocking Gel	§	(BJ P202-1286-US)
Containing Guar	§	
Derivative	§	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR 1.132 OF HOANG LE

I, Hoang Le, do hereby declare and state that:

1. I have been employed by BJ Services Company ("BJS") since 1988. Since 1990, I have been employed in the research and development of fracturing fluids and additives which support such fluids. During this time, I have specialized in fracturing fluids and other additives to enhance product performance of such fluids.

2. I am a named inventor on over 22 patents and pending applications directed to fracturing fluids and additives relating thereto.

3. I am currently a Project Manager for fracturing fluid systems and chemical additives relating to such fluid systems.

4. I am an inventor of the invention set forth in the claims of U.S. Patent Application Serial No. 10/810,539 ("Instant Application").

5. I have read and reviewed the Office Action of 10 March 2006 rendered in the proceeding of U.S. Patent Application Serial No. 10/810,539 ("Instant Application"). I have read and reviewed the following references cited in the Office Action: U.S. Patent No. 6,138,760 ("*Lopez*"); US Patent No. 5,547,026 ("*Brannon*"); 5,813,466 ("*Harris*"); and 5,201,370 ("*Dawson*").

6. The claims of the Instant Application recite the use of carboxymethyl guar (CMG) in a fluid to form a blocking gel within a wellbore. None of the references cited by the Examiner disclose the use of CMG in a base fluid to form a blocking gel within a wellbore.

7. The use of carboxymethylhydroxypropyl guar (CMHPG) in a crosslinkable gel to form a blocking gel has been taught in the prior art. The inventors of the Instant Application discovered that the use of CMG based fluids render unexpected results over CMHPG based fluids. In particular, use of CMG based fluids provides much lower leak off rates than CMHPG based fluids.

8. To demonstrate the unexpected results obtained by use of CMG based fluids, the following leak-off experiments were conducted under my control or supervision using a 2% KCl solution at 300°F (149° C), 200 psi Δ P, in accordance with the procedures and using the components set forth on pages 9-11 of the Instant Application and using the following polymer loadings:

60 pptg polymer (CMG and CMHPG)
2% KCl
3.0 gpt Buffer (AA)
5.0 gpt Delay Agent; and
0.50 gpt Zr crosslinker

70 pptg (CMG and CMHPG)
2% KCl
3.0 gpt Buffer (AA)
5.0 gpt Delay Agent; and
0.75 gpt Zr crosslinker

80 pptg (CMG and CMHPG)
2% KCl
3.0 gpt Buffer (AA)
5.0 gpt Delay Agent; and
1.0 gpt Zr crosslinker

The modified high temperature high pressure (HTHP) fluid loss cell described in the Instant Application was used to evaluate the leak-off efficiency of the compositions. The fluid loss data for CMG and CMHPG in 2% KCl 2.5 μ ceramic disc, 2.44 inch (6.2 cm) diameter, 300° F (149° C), 200 psi Δ P, and representative data points are set forth in the Table below:

Table

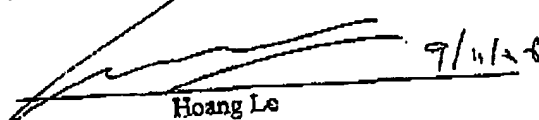
Time, hrs.	60 pptg CMPHG Vol., cc	60 pptg CMG Vol., cc	70 pptg CMPHG Vol., cc	70 pptg CMG Vol., cc	80 pptg CMPHG Vol., cc	80 pptg CMG Vol., cc
0.02	1.9	7.0	1.6	7.0	1.5	7.0
0.03	3.6		2.9	8.0	2.9	
0.08	6.8	8.0	6.1	8.0	6.2	8.0
0.13		8.9		8.0		8.0
0.17	10.1		10.1		11.1	
1.00	34.0	10.0	32	13.0	35.1	15.0
3.00	57.6	24.0	57	29.0	55.5	26.0
24.00	112.70	136.0	102.1	160.0	106.3	144.0

Additional data points are set forth in the accompanying FIG. 1 (60 pptg), FIG. 2 (70 pptg) and FIG. 3 (80 pptg) attached hereto wherein the legend "I" refers to those fluids containing CMPHG and "II" refers to those fluids containing CMG.

9. The results demonstrate a general lower leak off using the CMG fluid versus the CMPHG fluid. Lower leak-off is most important within the first 10 hours of introduction of the fluid into the formation in order to more readily gel the polymer and temporarily isolate the producing zone with minimal damage.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and believe are believe to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

DATED: September 11, 2006

 9/11/06
Hoang Le